

# STRUCTURE NO. 05810

LAPHAM ROAD

over

ROUTE 15

NEW CANAAN

*Indepth Inspection*

on

7/21/2010

*Inspected by Team 6*

*for Area 6*

<b>TEAM:</b>	Forwarded to TE3	Jim Matulis	Date	9/3/2010
<b>TE3:</b>	Reviewed by TE3	<i>Jim Matulis</i>	Date	9/9/2010
	BMM Required			NO
	Town Bridge			NO
	Rating <= 5 (Items 58,59,60 or 62)			NO
	Forwarded to Supervisor		Date	
	Forwarded to "To Be Copied Drawer"	<input checked="" type="checkbox"/>	Date	9/9/2010
	Date BRI-19 Entered			9/9/2010
<b>SUPERVISOR:</b>	Reviewed by supervisor		Date	
<b>SUPPORT:</b>	Date Copies Made	Q-22-10	BMM No	7 Nov
	Scanned By:		Date Scanned	
			PDF Box No	

**NBI: Yes**

Structure No.	05810	Town	New Canaan
Inspection Date	7/12/2010	Inspectors	Team 6

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### Loose Forms (not bound in report)

Number of  
Sheets Enclosed

Maintenance Memo			0
Flagging Memos			0
PONTIS Element Data Collection Form			1
Plan Sheets	Already on File	<input type="checkbox"/>	0

### Bound Report Pages

Title Cover Sheet		1
Table of Contents		1
Executive Summary		
Field Notes		7
Calculations:	Load Rating Evaluation	0
	Quantities & Cost Estimate	0
Photo Sheets		8
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### Forms

BRI-18 Bridge Inspection Report Form	7
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BRI-25 Highway Bridge Under Entry Form	1

### Comments:

Bridge Number

05810

STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

BRIDGE SAFETY &amp; EVALUATION

## STRUCTURE EVALUATION

SHEET 1 OF 18 (INSP. REPORT)

Inspected By:

J. Jones &amp; E. Picillo

Sufficiency Rating

91.06

Previous Inspection Date

5/14/2008

BS&amp;E Received

☐

Data Entry By:

Jim Matulis

Copies Made

☐

Data Entry Date:

5/5/2010

## IDENTIFICATION

Bridge Name

NEW CANAAN

Town Code

50580

5) Inventory Route:

A) Record Type

1

B) Signing Prefix

5

C) Level of Service

0

6) Feature Intersected

None of the bel

7) Facility Carried:

LAPHAM ROAD

9) Location

1.5 MILE-STAMFORD T.L.

11) Milepoint

0.13 Miles

16) Latitude

41deg

17) Longitude

73deg

98) Border Bridge:

A) State Code

☐

B) Percent Responsibility

☐

%

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

99) Border Bridge Structure No

☐☐

43) Structure Type, Main:

A) Material

5

B) Design Type

5

Box Beam or Girders

☐

- Multiple

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

44) Structure Type, Approach:

A) Material

0

Other

☐

B) Design Type

0

Other

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

45) Number of Spans, Main Unit

1

Other

☐

B) Design Type

0

Other

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

46) Number of Approach Spans

0

Other

☐

B) Design Type

0

Other

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

107) Deck Structure Type

9

Other

☐

B) Design Type

0

Other

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

108) Wearing Surface/Protective System:

A) Type of Wearing Surface

3

Latex Concrete or similar

☐

B) Type of Membrane

0

None

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

# STRUCTURE EVALUATION

SHEET 2 OF 2 FORM BRL-19 REV 10/00

SHEET 2 OF 18

Bridge Number	05810	NBIS Length	
Town Name	NEW CANAAN	Yes	73
Facility Carried	LAPHAM ROAD		
Feature Crossed	ROUTE 15		

Inspected By: Jones & Pucillo

CLASSIFICATION		Yes	No
112) NBIS Bridge Length	0		
104) Highway System	0		
26) Functional Class	19		
100) Defense Highway	0		
101) Parallel Structure	N		
102) Direction of Traffic	2		
103) Temporary Structure	2-way traffic		
110) Designated National Network	0		
20) Toll	3		
21) Maintain	1		
22) Owner	1		
Report Class	S		
37) Historical Significance	1		

## WATERWAY

DrainageBasinCode	Rating	By
38) Navigation Control		
39) Navigation Vert Cir.		
116) Vert-Lift Brg Nav Min		
111) Pier Abutment Protection		

## PROPOSED IMPROVEMENTS

75A) Type of Work Proposed	Rating	By
75B) Work Done By		
76) Length of Struct. Improvement	0	
94) Bridge Improvement Cost	\$ 0	
95) Roadway Improvement Cost	\$ 0	
96) Total Project Cost	\$ 0	
97) Year of Improvement	0	
114) Future ADT	0	
115) Year Future ADT	0	

## POSTED SIGNS & UTILITIES

Other Posted Signs 1	Rating	By
Other Posted Signs 2		
Actual P.L. Single Unit Truck	tons	
Rec. P.L. Single Unit Truck	tons	
Actual P.L. Semi-Trailer Truck	tons	
Rec. P.L. Semi-Trailer Truck	tons	
Rec. P.L. All Vehicles	tons	
Posted Vert Clearance On Bridge	ft	
Posted Vert Under Clearance	ft	
Posted Speed Limit	mph	
Utility		
Telephone		

## CONDITION

LOAD RATING AND POSTING	Rating	By
31) Design Load	5	
63) Operating Rating Type	1	
64) Operating Rating	74.0	
65) Inventory Rating Type	1	
66) Inventory Rating	38.0	

## APPRAISALS

Rating	By
58) Deck	
59) Superstructure	
60) Substructure	
61) Channel & Chan. Protection	
62) Culverts	
67) Structure Evaluation	
68) Deck Geometry	
69) Under Clear Vert & Horiz	
71) Waterway Adequacy	
72) Approach Rdwy Alignment	
113) Scour Critical	

Items 58 Thru 72 Checked By: [Signature]

36) Traffic Safety Features:

A) Bridge Railings	1
B) Transitions	1
C) Approach Guardrail	1
D) Approach Guardrail End	1

## OTHER FEATURES

Rating	By
Fence Required	No
Fence Present	No
Fence Height	0.0 ft
Fence Type	
Fence Material	
Fence Top Type	
Barrel Ladder	No
Stand Pipes	No
Cat Walks	No
Movable Inspection System	No
Loose Concrete Checked?	Yes

## INSPECTION COMMENTS

Proposed Next Indepth Insp Year	2010
Senior Supervisor	Ron Jantzen
Supervisor	Joseph Kozlowski
REVIEWED BY:	<u>[Signature]</u>
Date	9/9/2010

STATE OF CONNECTICUT  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF BRIDGE SAFETY EVALUATION  
INVENTORY ROUTE  
UNDER STRUCTURE EVALUATION

FORM BRI-25 REV 10/00

SHEET 3 OF 18 (INSP. REPORT)

## CLASSIFICATION

MUST BE FILLED OUT OR VERIFIED ON THE FIRST INSPECTION MADE BASED ON THE NEW FHWA GUIDE 102

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## Connecticut Department of Transportation

### Bridge Inspection Report BRI-18

Bridge #: 05810

Inspection Date: 07/12/2010

Inspection Type:	Indepth	Previous Inspection Date:	5/14/2008	Snooper Required:	No
Inspection Performed By:	Team 6	Feature Carried:	LAPHAM ROAD	Snooper Used:	No
Town:	NEW CANAAN	Feature Intersected:	ROUTE 15	Year Built:	1937
Location:	1.5 MI-E-STAMFORD T.L.	Main Design:	Box Beam or Girders - Multiple	Year Rebuilt:	1989
Main Material:	Prestressed concrete				

#### Visits

Visit Date:	Temp:	Start Time:	End Time:	Inspector:	Task:
7/12/2010	90	10:45:00 AM	11:45:00 AM	E. Pucillo	Inspector
				J. Jones	Inspector

#### Inspectors:

DECK:	Latex Modified Concrete Deck	Overall Rating:	6
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#### Rating

OVERLAY:	6	Latex modified concrete exhibits: Longitudinal and transverse cracking throughout up to 1/16" wide.  Areas of light mapcracking.  A 3' x 3' and a 4' x 1' hollow area over the south abutment.  A 3' x 2" x 1" deep spall over the north abutment.  Bands of diagonal cracking at all four corners up to 10' long. Deck has a deep hollow sound because there is a gap between deck units and concrete deck. Deck was chain dragged.
DECK-STR. CONDITION:	6	Integral Deck: Per CT Bridge Inspection Manual rating based only on the condition of the riding surface.
CURBS:	7	Sloped granite blocks with minor scrape marks.
MEDIAN:	N	-
SIDEWALKS:	N	-
PARAPET:	7	Cast in place and precast facade panels attached below parapet. (see GIRDERS item for description of condition). The parapets have random vertical hairline cracks, some with efflo.
RAILING:	N	-
PAINT:	N	-

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<b>FENCE:</b>	N	-
<b>DRAINS:</b>	N	-
<b>LIGHTING STANDARD:</b>	N	-
<b>UTILITIES TYPE/SIZE:</b>	8	There are 4-1/2 inch telephone conduits attached to underside of box girder 1.
<b>CONSTR JOINTS:</b>	N	-
<b>EXPANSION JOINTS:</b>	6	<p>North Abutment: The compression joint seal is filled with sand. The concrete header has transverse hairline cracks, impact scrapes, and edge spalls up to 20 linear feet.</p> <p>South Abutment: There is no formal joint at the south abutment. There is a gap up to 2" filled with sand between the approach pavement and overlay. There is 20 linear feet of bituminous spalling adjacent to the open joint.</p>

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59. **SUPERSTRUCTURE:** PRESTRESSED CONCRETE BOX GIRDERS**Overall** 6  
**Rating:**

## Rating

<b>BEARING DEVICES:</b>	7	<p>The premolded joint material at the south abutment is squeezing out under random units.</p> <p>The elastomeric bearings at the north abutment appear to be in good condition based on limited view.</p>
<b>STRINGERS:</b>	N	-
<b>GIRDERS:</b>	6	<p>The underside of the prestressed deck units exhibit: Intermittent longitudinal hairline cracks at random locations on all units up to 30' long x up to 0.030" open.</p> <p>Typically the longitudinal cracking ranges from 2' to 8' long x 0.020" open. There are isolated honeycomb areas with and without mortar patches. There is moderate efflorescence between units 10 and 11 near the south abutment.</p> <p>The precast façade panels have random hairline cracks. Panel 1 and a portion of panel 2 on the east side over the northbound right lane have been replaced with new panels. This new section has minor collision damage.</p> <p>However there is a portion of panel 2 that has two 1/8" wide cracks on the interior face over the left lane. The concrete sounded solid but this condition should be monitored during future inspections. There are isolated areas of mapcracking, shallow spalls and vertical hairline cracks on the other panels.</p>
<b>FLOOR BEAMS:</b>	N	-
<b>TRUSSES-GENERAL:</b>	N	-
<b>TRUSSES-PORTALS:</b>	N	-
<b>TRUSSES-BRACING:</b>	N	-
<b>PAINT:</b>	N	-
<b>RUST:</b>	N	-
<b>MACHINERY MOV SPAN:</b>	N	-
<b>RIVETS &amp; BOLTS:</b>	6	<p>There are angles that are bolted to the underside of the fascia units and to the interior of the façade panels.</p> <p>One out of the seven bolts is not fully engaged, but tight (washer is loose) at the following locations: West fascia , at panel 1 over the right lane northbound. West fascia, at panel 5 over the right lane southbound. There is up to a 5/8" gap between the panel and angle at these locations.</p>
<b>WELDS - CRACKS:</b>	N	-
<b>TIMBER DECAY:</b>	N	-
<b>CONCRETE CRACKING:</b>	5	See GIRDER comment and COLLISION DAMAGE.
<b>COLLISION DAMAGE:</b>	6	100% collision damage panel 1 and portion of panel 2 removed by CDOT maintenance.



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MEMBER ALIGNMENT:	8	-
DEFLECT. UNDER LOAD:	N	-
VIBRATION UNDER LOAD:	N	-
STAND PIPES:	N	-
BARREL LADDERS:	N	-

ARE BARREL LADDERS OSHA COMPLIANT? NA

60. SUBSTRUCTURE: REINFORCED CONCRETE ABUTMENTS Overall Rating: 6

Rating

ABUTMENTS-STEM:	7	The southwest abutment seat has a full width x 6" x 3" deep spall at the top on the fascia side and there is evidence of leakage.  At each abutment there are 4 full height and a few partial height cracks up to 60" long. All of these cracks are hairline to 1/16" in width. The granite curb at the bottom of the concrete crash walls have minor scrapes.
ABUTMENTS-BACKWALL:	N	Not visible.
ABUTMENTS-FOOTINGS:	N	Not visible.
ABUTMENTS-SETTLEMENT:	N	-
ABUTMENTS-WINGWALLS:	5	The wingwalls have daigonal and transverse cracks up to 7' x 1/16" wide with efflorescence and the following deterioration:  Southwest and southeast wingwalls: There are a few spalls up to 2' x 6" x 3" deep. Also, there are several locations of heavy scale up to 2' x 4' x 1" deep with heavy efflorescence. The southwest exhibits an area of map cracking with hollow concrete on the pylon and wing totalling 140 sf.  Northwest and northeast wingwalls: Each wingwall has one large spall with exposed rusted rebar, 2' x 2' x 6" deep and 2' x 1' 6" deep respectively. Also, the northwest wingwall has a 2' x 2' hollow area with large cracks and edge spalls around.
PIERS/BENTS-CAPS:	N	-
PIERS/BENTS-PILE BENT:	N	-
PIERS/BENTS-COLUMNS:	N	-
PIERS/BENTS-FOOTING:	N	-
PIERS/BENTS-SETTLMT:	N	-
EROSION-SCOUR:	N	-
CONCRETE CRACK-SPALL:	6	See ABUTMENTS STEM/WINGWALLS

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STEEL CORROSION:	N	-
PAINT:	N	-
TIMBER DECAY:	N	-
COLLISION DAMAGE:	8	-
DEBRIS:	N	-

**61. CHANNEL & CHANNEL PROTECTION:**

-

Overall Rating:

N

**62. CULVERTS & RETAINING WALL:**

-

Overall Rating:

N

**65. APPROACH CONDITION**

BITUMINOUS CONCRETE ON FILL

Overall Rating:

5

**Rating**

APPROACH SLAB:	N	-
RELIEF JOINTS:	N	-
APPROACH GUIDE RAIL:	7	Metal beam rail at all four corners. There is minor impact damage at the southwest corner.
APPROACH PAVEMENT:	4	South approach: The bituminous concrete has heavy ravelling with potholes up to 1' diameter x 1" deep in the wheel paths. There is several transverse and longitudinal cracks open up to 1" wide throughout and uneven bituminous patches. Bituminous patches on both approaches. (see sketches)
APPROACH EMBANKMENT:	8	-

**TRAFFIC SAFETY FEATURES**

**Rating**

**BRIDGE RAILINGS:**

Last Inspection:  
1  
Current: -

-

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TRANSITIONS:	Last Inspection:	-
	1 Current: -	
APPROACH GUARDRAILS:	Last Inspection:	-
	1 Current: -	
APPR. GUARDRAIL ENDS:	Last Inspection:	-
	1 Current: -	

## 66. LOAD POSTING

- Posted  
Loading -

SINGLE UNIT (TONS):	Last Inspection:	-
	Current: -	
SEMI TRAILER (TONS):	Last Inspection:	-
	Current: -	
4 AXLE (TONS):	Last Inspection:	-
	Current: -	
3S2 (TONS):	Last Inspection:	-
	Current: -	
ADVANCE WARNING (Y/N):	-	-
LEGIBILITY:	-	-
VISIBILITY/LOCATION:	-	-

## 67. MISCELLANEOUS



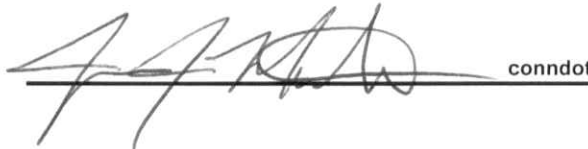
Rating

MIN. VERT. UNDERCLEARANCE:	Last Inspection:	At edge of travelway. (10-10" at edge of roadway).
	12' 6" Current: -' -"	
POSTED CLR. UNDER BRIDGE:	Last Inspection:	See below.
	12' 2" Current: -' -"	
POSTED CLR. ON BRIDGE:	Last Inspection:	None.
	0' 0" Current: -' -"	

10/18

<b>ADVANCED WARNING (YES/NO):</b>	No	12'-1" posted southbound approximately 100' from bridge with no other advance warning. 12'-3" posted northbound approximately 100' from bridge with advanced warning on Route 124 entrance ramp.
<b>SPEED LIMIT (IF ANY):</b>	Last Inspection: -	
	Current: -	
<b>CHARACTER OF TRAFFIC:</b>		Light and mixed.

<b>ADDITIONAL NOTES:</b>	-
<b>ADDITIONAL COMMENTS:</b>	Bridge ID's are in place.

<b>Inspectors' Signatures:</b>	1) 	Date: 9/3/2010
	2) 	Date: 09/03/2010
	3) _____	Date: ---/---/---
	4) _____	Date: ---/---/---
<b>P.E. Signature:</b>	_____	Date: ---/---/---
<b>P.E. #:</b>	_____	Date: ---/---/---
<b>Reviewed by:</b>	 conndot	Date: 9/9/2010



BRIDGE NO: 05810

DATE: 7/12/2010

CREW: Team 6

SHEET 11 of 18

☐ Field Original☐ Transcribed By: \_\_\_\_\_

DESCRIPTION: Hampham Rd over Rte 15, New Canaan

Topside Bare Conc. Deck



## LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MPC) OR HAIRLINE MAP CRACKS (HLMPC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVV, MED OR LT)
- WITH EFFLORESCENCE

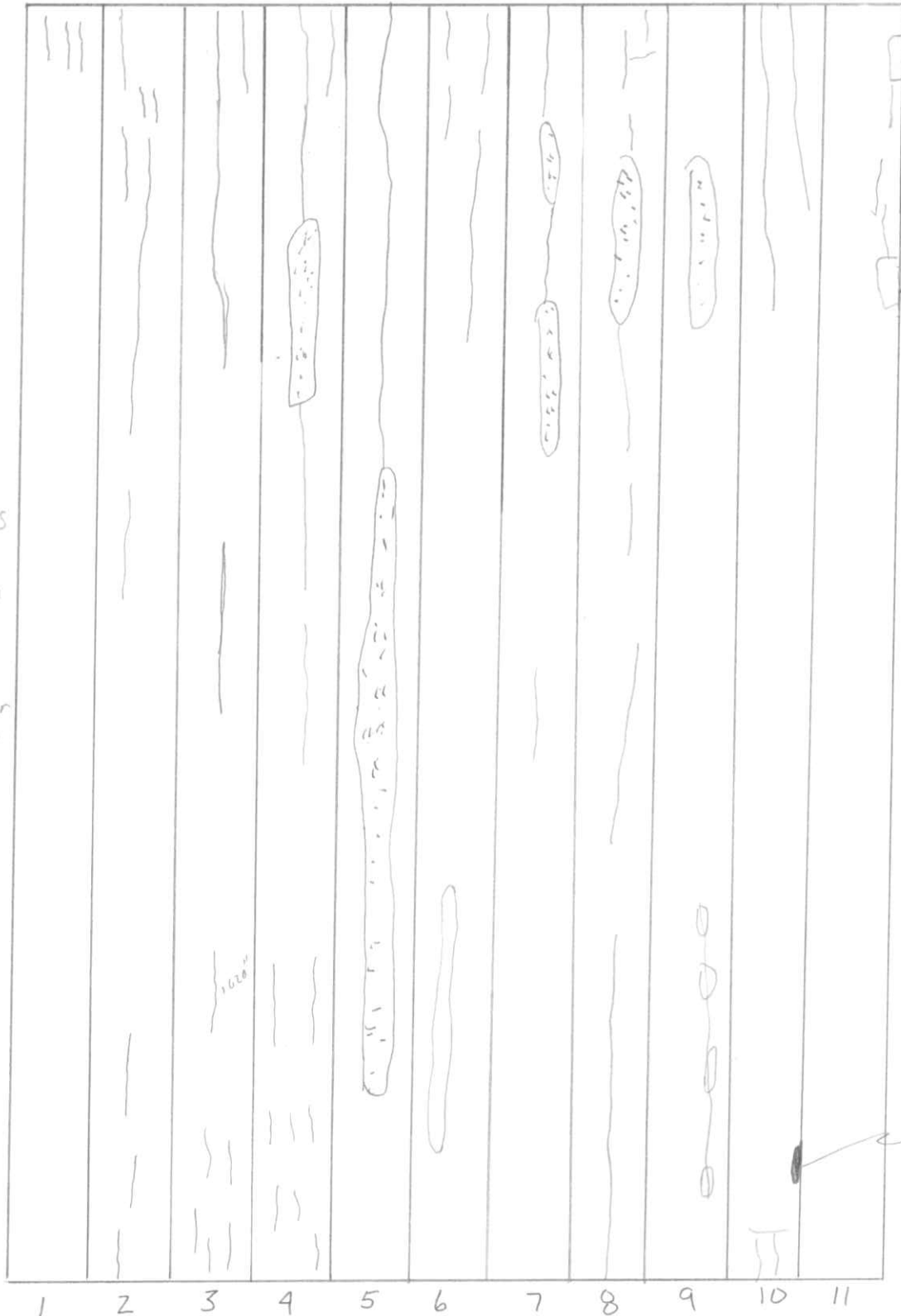
REV. NO:	DATE:	COMPANY:	CREW:
△			
△			
△			
△			

BR. # 05810 Lampham Road over Route 15, New Canaan

12/18




Abutment #2



Key

 = efflo stains

 = Conc. Patch Areas

 = Honeycomb Areas w/ Discoloration

clips for Fascia Panels

Efflo Frosting

Abutment #2 N.T.S



# HAKS

FIELD  
NOTES

JOB NO.170-2357

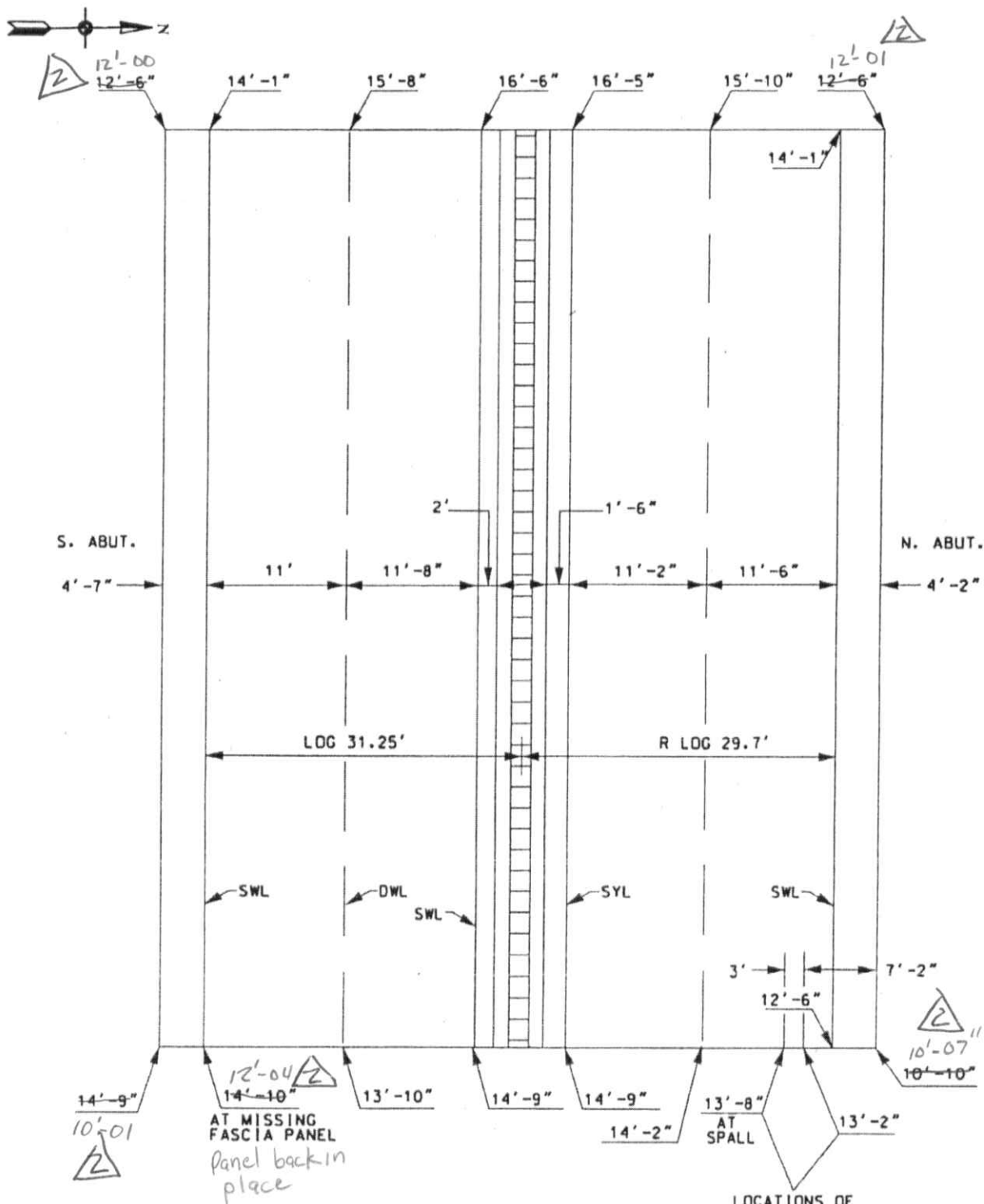
DATE: 2/1/06

CREW: JM, LLV, CWD

BRIDGE NO. 05810

SHEET

~~12/18~~ 13/18



CLEARANCE DIAGRAM  
(N.T.S.)

REVISION	△	DATE	CREW	REVISION	△	DATE	CREW
		5/14/08	No Change				
REVISION	△	DATE	CREW	REVISION	△	DATE	CREW
		7-12-10	Team to Note Changes				



BRIDGE NO: 05810

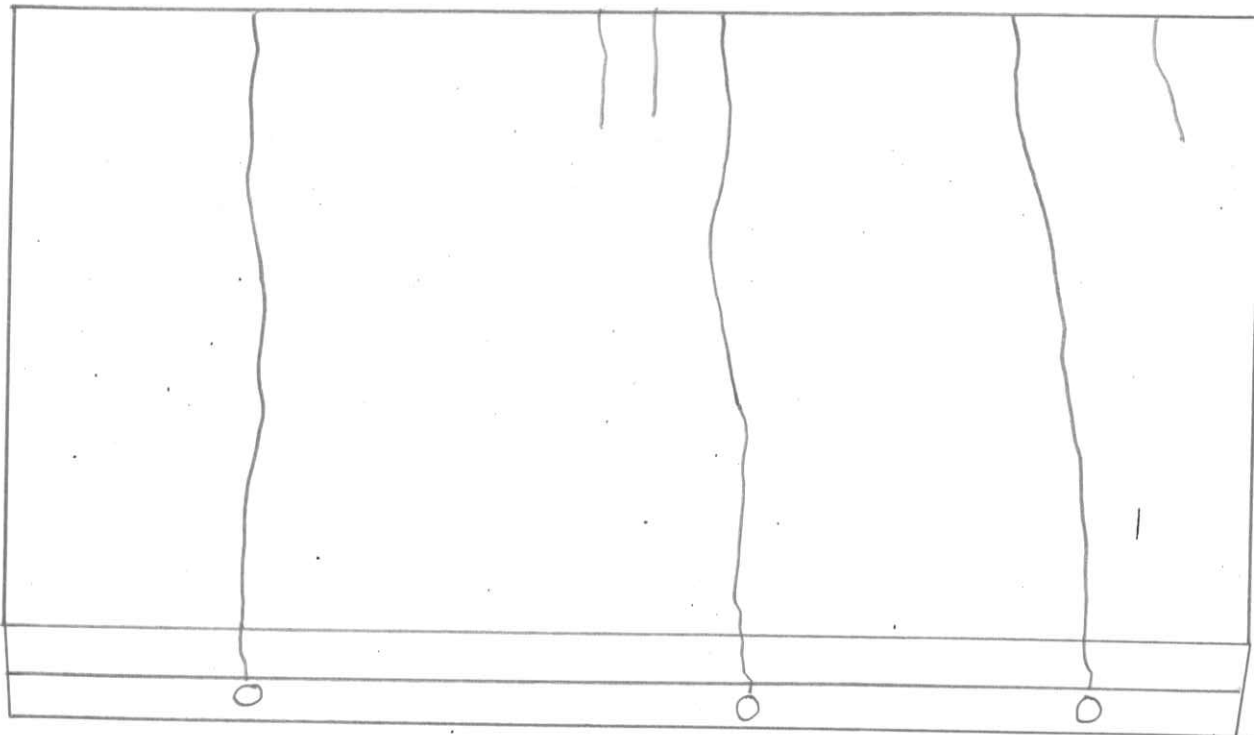
DATE: 7/12/2010

CREW: Team 6

SHEET 14 of 10

☐ Field Original☐ Transcribed By: \_\_\_\_\_

DESCRIPTION: Lapham Rd over Rte 15, New Canaan

Abutment #1 N.T.S

## LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MPC) OR HAIRLINE MAP CRACKS (HLMPC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVV, MED OR LT)
- WITH EFFLORESCENCE

REV. NO:	DATE:	COMPANY:	CREW:
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BRIDGE NO: 05810

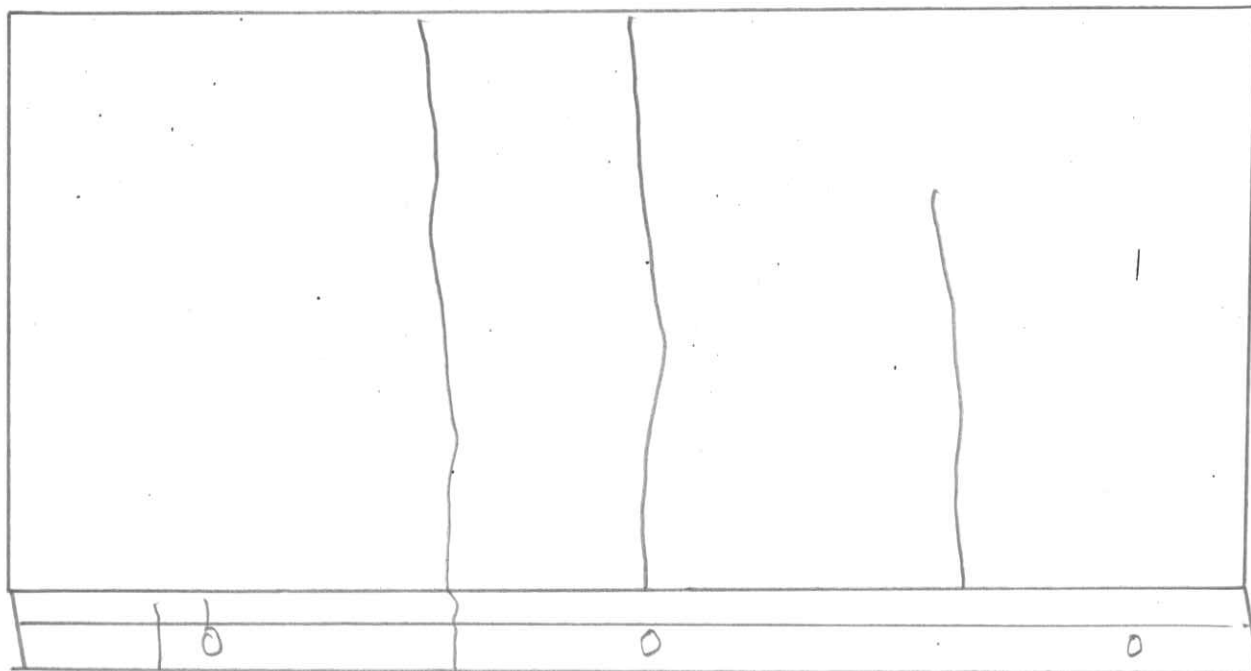
DATE: 7 / 12 / 2010

CREW: Team 6

SHEET 15 of 18

☐ Field Original☐ Transcribed By: \_\_\_\_\_

DESCRIPTION: Lapham Rd o/ Rte. 15, New Canaan

Abutment #2 N.T.S.

## LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (MPC) OR HAIRLINE MAP CRACKS (HLMPC)
- HAIRLINE CRACK (HLC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVV, MED OR LT)
- WITH EFFLORESCENCE

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BRIDGE NO: 05810

DATE: 7/12/2010

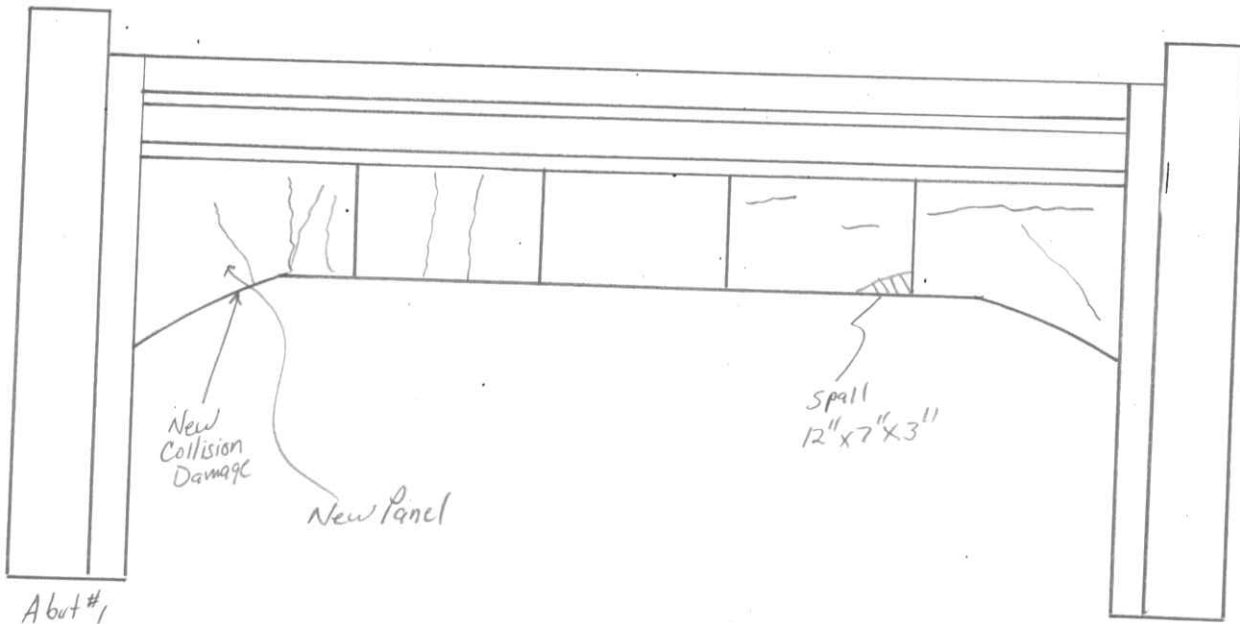
CREW: Team 6

SHEET 16 of 18

☐ Field Original

☐ Transcribed By: \_\_\_\_\_

DESCRIPTION: Lapham Rd / Rte 15, New Canaan



East Elevation N.T.S.

# LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (H/C) OR HAIRLINE MAP CRACKS (H/L/C)
- HAIRLINE CRACK (H/C) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (HVV, MED OR LT)
- WITH EFFLORESCENCE

REV. NO:	DATE:	COMPANY:	CREW:
△			
△			
△			
△			



BRIDGE NO: 05810

DATE: 7/12/2010

CREW: Team 6

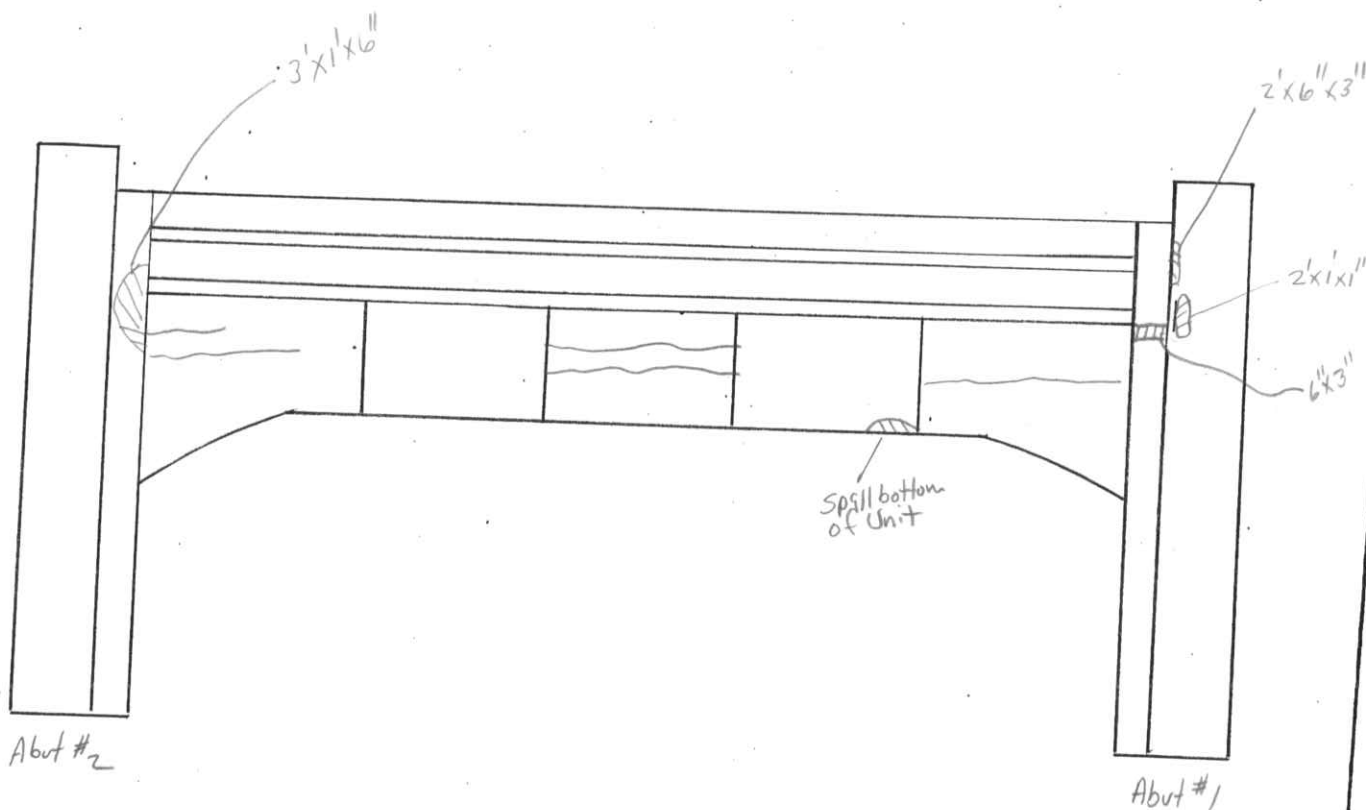
SHEET 17 of 18

☐ Field Original

☐ Transcribed By: \_\_\_\_\_

DESCRIPTION:

Lapham Rd over Rte. 15, New Canaan



West Elevation N.T.S

LEGEND

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS (H/C) OR HAIRLINE MAP CRACKS (H/M/C)
- HAIRLINE CRACK (H/LC) OR CRACKS (CRK)
- HONEY COMB AREA
- SCALE AREA (H/V, MED OR LT)
- WITH EFFLORESCENCE

REV. NO:	DATE:	COMPANY:	CREW:
△			
△			
△			
△			

18/18

# Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 05810

Agency ID: 05810

Sufficiency Rating: 91.4

## IDENTIFICATION

State 1: 09 Connecticut Struc Num 8: 05810  
 Facility Carried 7: LAPHAM ROAD Location 9: 1.5 MI-E-STAMFORD T.L.  
 Rte.(On/Under)5A: Route On Structure Rte. Signing Prefix 5B: 5 City Street  
 Level of Service 5C: 0 None of the below Rte. Number 5D: 00000  
 Directional Suffix 5E: 0 N/A (NBI) % Responsibility: 0  
 SHD District 2: 03 County Code 3: Fairfield  
 Place Code 4: NEW CANAAN Mile Post 11: 0.130 mi  
 Feature Intersected 6: ROUTE 15  
 Latitude 16: 41d 06' 54" Longitude 17: 073d 29' 36"  
 Border Bridge Code 98: Unknown (P)  
 Border Bridge Number 99: NA

## INSPECTION

Frequency 91: 24 months Inspection Date 90: 7/12/2010 Next Inspection: 07/12/2012  
 FC Frequency 92A: NA FC Inspection Date 93A: NA Next FC Inspection: NA  
 UW Frequency 92B: NA UW Inspection Date 93B: NA Next UW Inspection: NA  
 SI Frequency 92C: NA SI Date 93C: NA Next SI: NA  
 Element Frequency: 24 months Element Inspection Date: 07/12/2010 Next Elem. Insp. Due: 07/12/2012

## CLASSIFICATION

Defense Highway 100: 0 Not a STRAHNET hwy Parallel Structure 101: No || bridge exists  
 Direction of Traffic 102: 2 2-way traffic Temporary Structure 103: Unknown (NBI)  
 Highway System 104: 0 Not on NHS NBIS Length 112: Long Enough  
 Toll Facility 20: 3 On free road Functional Class 26: 19 Urban Local  
 Historical Significance 37: 1 Br on Natl Reg Hist Pl  
 Owner 22: 01 State Highway Agency  
 Custodian 21: 1 1

## STRUCTURE TYPE AND MATERIALS

Number of Approach Spans 46: 0 Number of Spans Main Unit 45: 1  
 Main Span Material/Design 43A/B:  
 5 Prestressed Concrete 05 Multiple Box Beam  
 Deck Type 107: 9 Other  
 Wearing Surface 108A: 3 Latex Concrete/Similar  
 Membrane 108B: 0 None  
 Deck Protection 108C: 1 Epoxy Coated Reinforced

## CONDITION

Deck 58: 6 Satisfactory Super 59: 6 Satisfactory Sub 60: 6 Satisfactory  
 Culvert 62: N N/A (NBI) Channel/Channel Protection 61: N N/A (NBI)

## LOAD RATING AND POSTING

Inventory Rating Method 65: 1 LF Load Factor Operating Rating Method 63: 1 LF Load Factor  
 Inventory Rating 66: HS20.9 Operating Rating 64: HS40.8  
 Design Load 31: 5 MS 18 (HS 20) Posting 70: 5 At/Above Legal Loads  
 Posting status 41: A Open, no restriction

## AGE AND SERVICE

Year Built 27: 1937 Year Reconstructed 106: 1989  
 Type of Service on 42A: 1 Highway  
 Type of Service under 42B: 1 Highway  
 Lanes on 28A: 2 Lanes Under 28B: 4 Detour Length 19: 1.9 mi  
 ADT 29: 900 Truck ADT 109: 2 % Year of ADT 30: 1997

## APPRAISAL

Bridge Rail 36A: 1 Meets Standards Approach Rail 36C: 1 Meets Standards  
 Transition 36B: 1 Meets Standards Approach Rail Ends 36D: 1 Meets Standards  
 Str. Evaluation 67: 7 Deck Geometry 68: 6 Equal Min Criteria  
 Underclearance, Vertical and Horizontal 69: 3 Intolerable - Correct  
 Waterway Adequacy 71: N Not applicable Approach Alignment 72: 6 Equal Min Criteria  
 Scour Critical 113: N Not Over Waterway

## GEOMETRIC DATA

Length Max Span 48: 62.0 ft Structure Length 49: 73.2 ft  
 Curb/Sdwk Width L 50A: 0.0 ft Curb/Sidewalk Width R 50B: 0.0 ft  
 Width Curb to Curb 51: 29.9 ft Width Out to Out 52: 34.8 ft  
 Approach Roadway Width 32: 24.0 ft Median 33: 0 No median (w/ shoulders)  
 Deck Area: 2,540.3 sq. ft  
 Skew 34: 0.00 ° Structure Flared 35: 0 No flare  
 Minimum Vertical Clearance Over Bridge 53: 328.1 ft  
 Minimum Vertical Underclearance Reference 54A: H Hwy beneath struct  
 Minimum Vertical Underclearance 54B: 12.7 ft  
 Minimum Lateral Underclearance Reference R 55A: H Hwy beneath struct  
 Minimum Lateral Underclearance R 55: 3.9 ft  
 Minimum Lateral Underclearance L 56: 1.6 ft

## PROPOSED IMPROVEMENTS

Bridge Cost 94: \$ 1,000 Type of Work 75: 38 Other Structural  
 Roadway Cost 95: \$ 1,000 Length of Improvement 76: 0.3 ft  
 Total Cost 96: \$ 2,000 Future ADT 114: 450  
 Year of Cost Estimate 97: 2000 Year of Future ADT 115: 2019

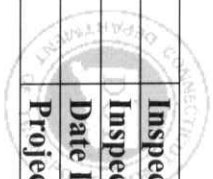
## NAVIGATION DATA

Navigation Control 38: N NA-no waterway  
 Vertical Clearance 39: 0.0 ft Horizontal Clearance 40: 0.0 ft  
 Pier Protection 111: Unknown (NBI) Lift Bridge Vertical Clearance 116:

## ELEMENT CONDITION STATE DATA

Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
UNIT0	22/3	P Conc Deck/Rigid Ov	(SF)	2,540	100 %	2,540	0 %	0	0 %	0	0 %	0	0 %	0
UNIT0	104/3	P/S Conc Box Girder	(LF)	719	65 %	469	35 %	250	0 %	0	0 %	0	0 %	0
UNIT0	215/3	R/Conc Abutment	(LF)	69	97 %	66	3 %	3	0 %	0	0 %	0	0 %	0
UNIT0	301/3	Pourable Joint Seal	(LF)	30	100 %	30	0 %	0	0 %	0	0 %	0	0 %	0
UNIT0	331/3	Conc Bridge Railing	(LF)	200	97 %	194	3 %	7	0 %	0	0 %	0	0 %	0
UNIT0	358/3	Deck Cracking SmFlag	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0

<b>Bridge No.</b>	05810	<b>Inspected by:</b>	JAMES JONES
<b>Town:</b>	New Canaan	<b>Inspected by:</b>	ED PUCILLO
<b>Feature Carried:</b>	Lapham Road	<b>Date Inspected:</b>	07/12/2010
<b>Feature Crossed:</b>	Route 15	<b>Project No.:</b>	

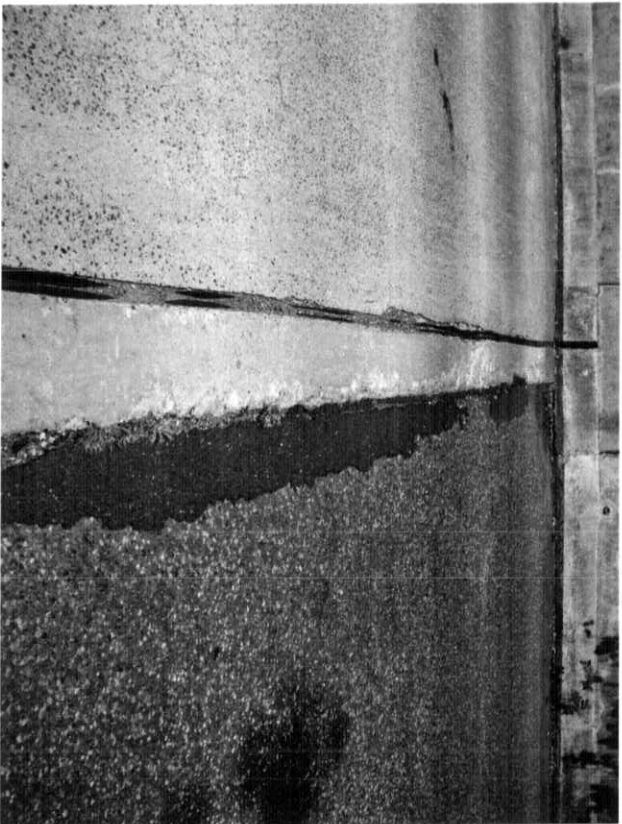
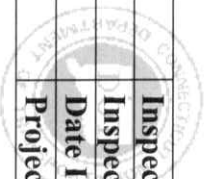


**Photo #1 :**  
**View looking south**



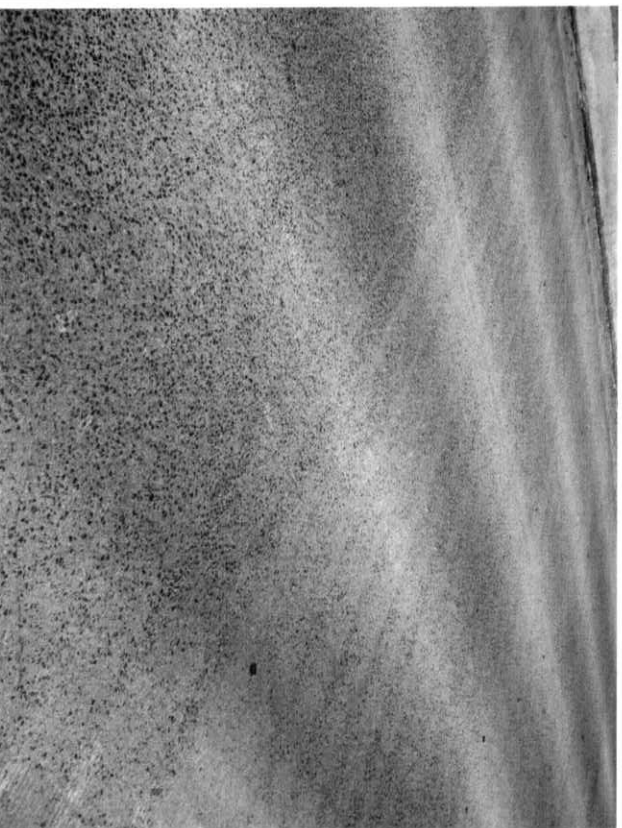
**Photo #2 :**  
**View looking north**

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<b>Feature Crossed:</b>	Route 15	<b>Project No.:</b>	



**Photo #3 :**

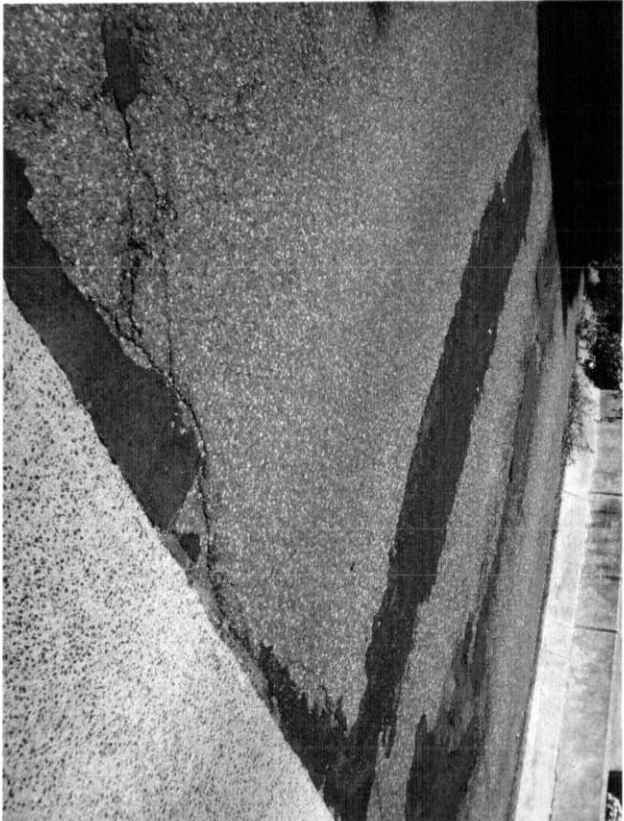
**Joint over abutment #2**



**Photo # 4:**

**General view of wearing surface**

<b>Bridge No.</b>	05810	<b>Inspected by:</b>	JAMES JONES
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**Photo #5:**

**Bit. patches approach pavement south**

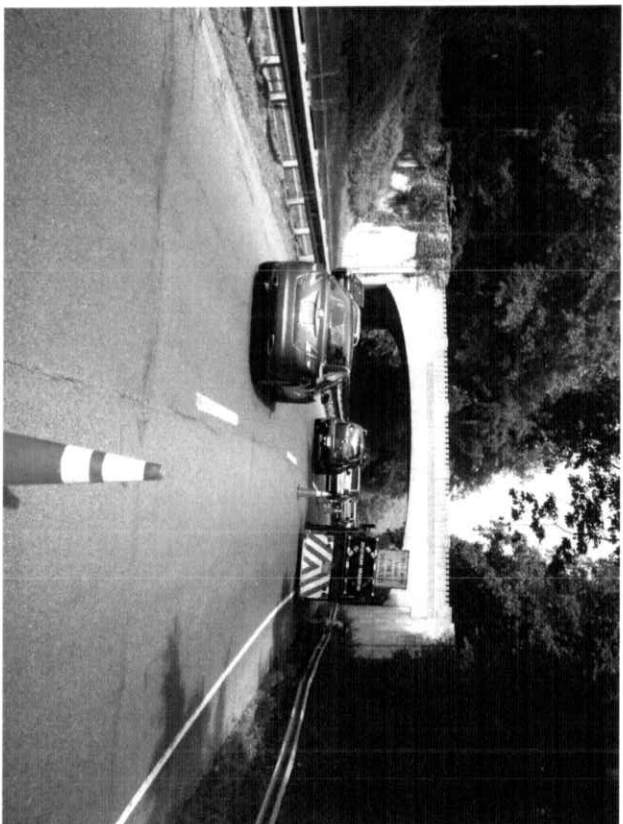
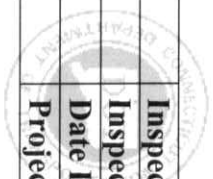


**Photo #6:**

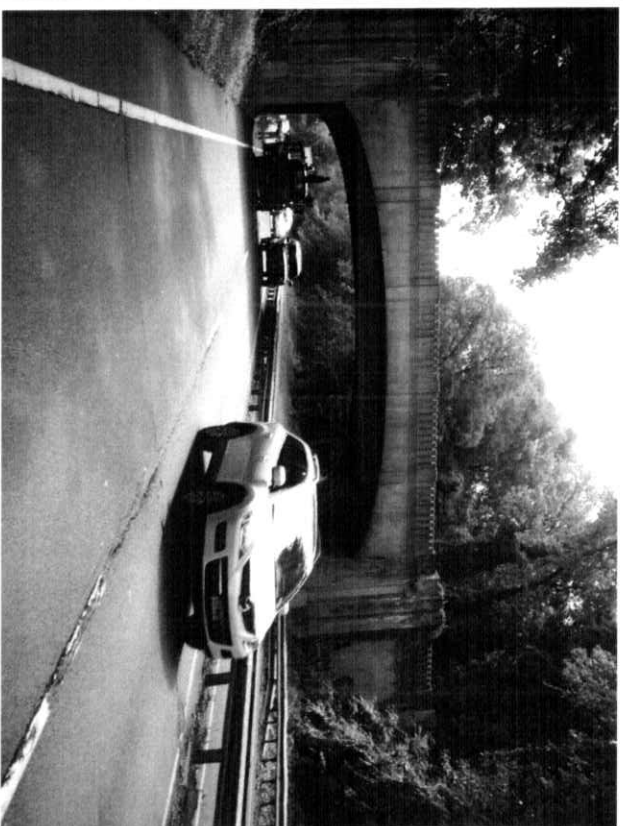
**2" wearing surface taken at southwest edge**



<b>Bridge No.</b>	05810	<b>Inspected by:</b>	JAMES JONES
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<b>Feature Crossed:</b>	Route 15	<b>Project No.:</b>	



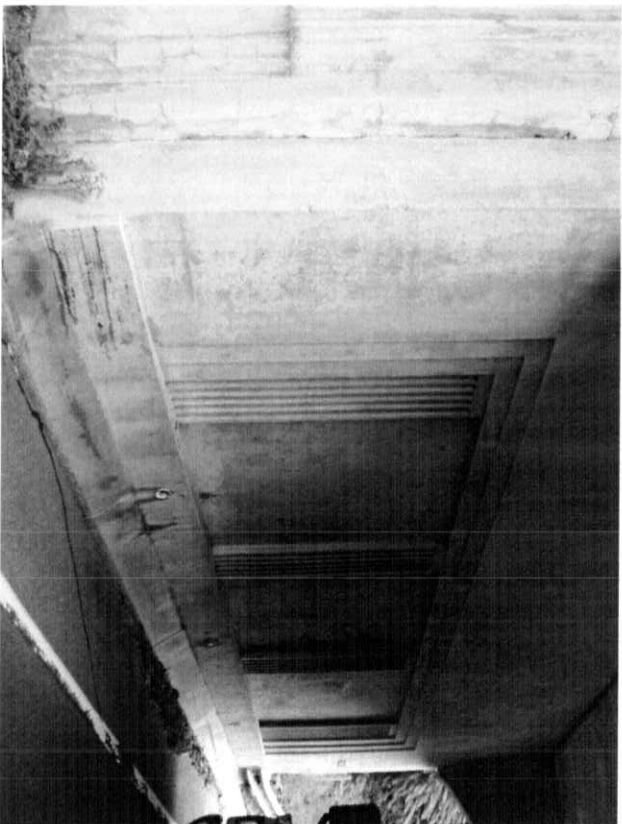
**Photo #7**  
**East elevation**



**Photo #8**  
**West elevation**

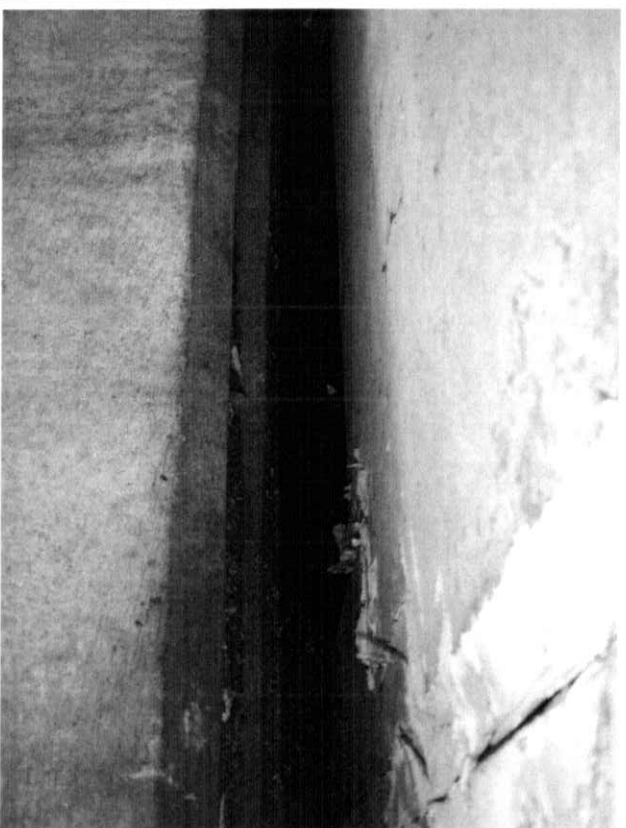


<b>Bridge No.</b>	05810	<b>Inspected by:</b>	JAMES JONES
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<b>Feature Crossed:</b>	Route 15	<b>Project No.:</b>	



**Photo #9**

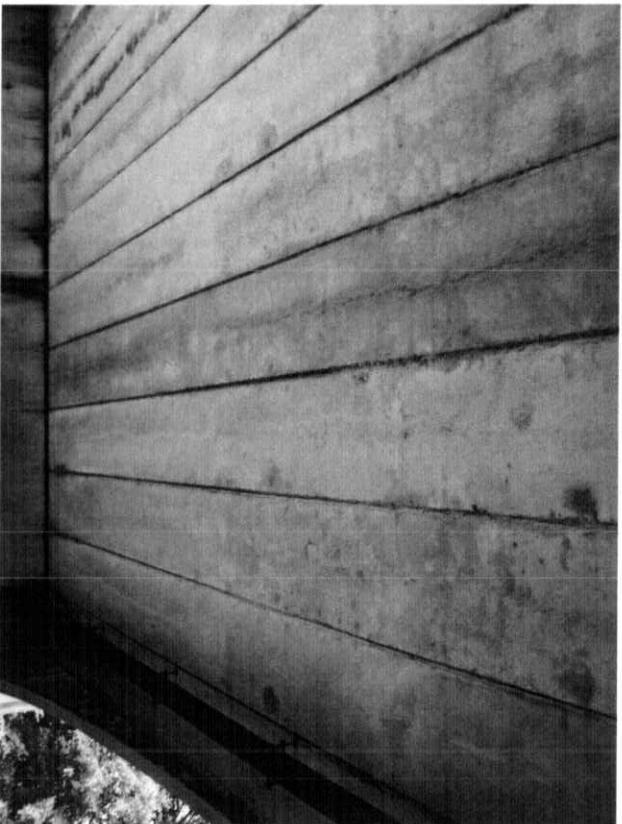
**General condition of abutment #1**



**Photo # 10**

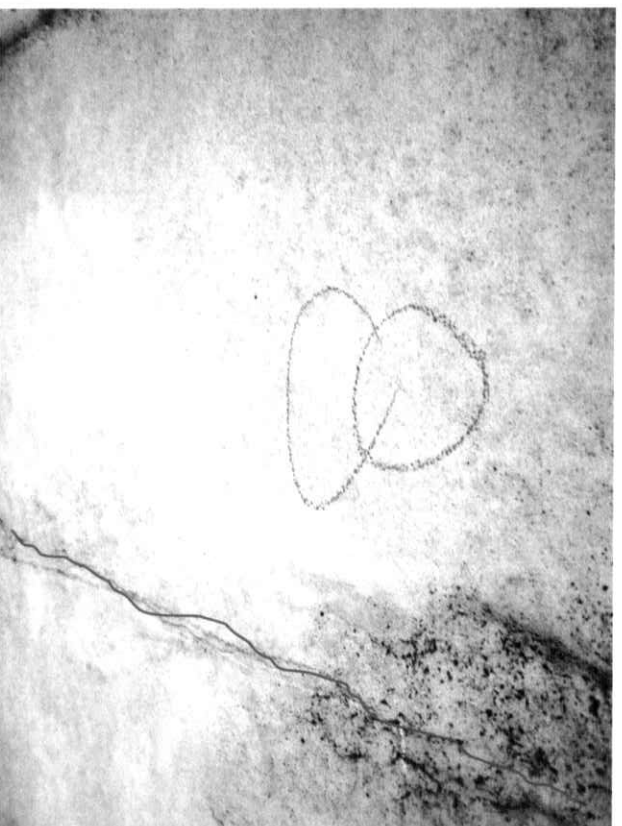
**Typical elastomeric bearing pad over abutment #1**

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**Photo # 11**

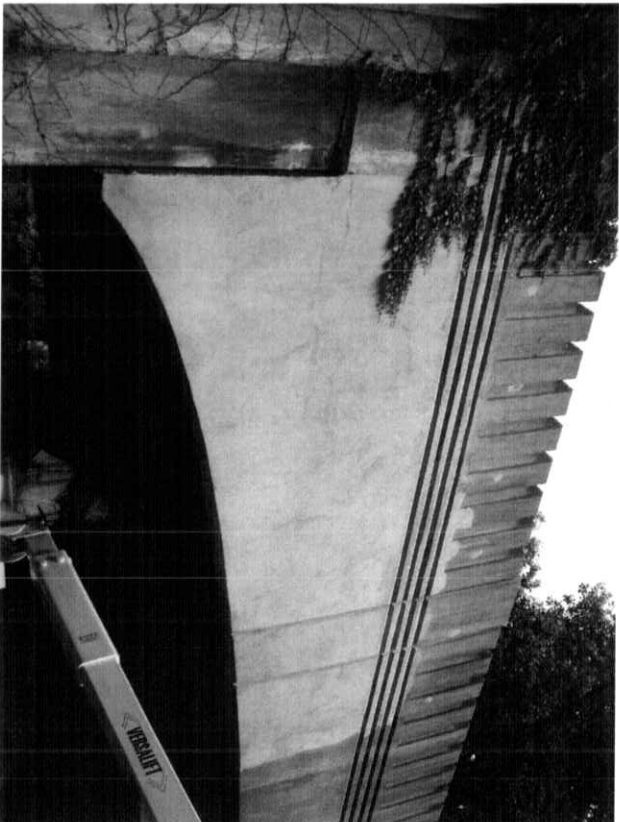
**General view of underside**



**Photo # 12**

**Typical crack bottom of unit #8**

<b>Bridge No.</b>	05810	<b>Inspected by:</b>	JAMES JONES
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**Photo #13**

**New panel at southeast with collision damage**



**Photo # 14**

**Small spall with vertical cracks from collision damage bottom of panel at southeast**

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Feature Crossed:	Route 15	Project No.:	



Photo #15

Vertical cracks in east panel from collision damage



Photo # 16

Cracks adjacent to panel random hanger bracket